



Safety and Ecology Corporation
SEC Instrumentation Services
10512 Lexington Dr. Suite 200
Knoxville, TN 37932

SEC Instrumentation Services
2750 Salk Ave. Suite 101
Richland, WA 99354

**NEED
INSTRUMENTS ?**
TN 1-800-905-0501
WA 1-877-999-7500

RENTAL EQUIPMENT

Instrumentation Catalog



**Radiological
Industrial Hygiene
INSTRUMENTATION**
RENTAL, CALIBRATION, & REPAIR

**Safety and Ecology Corporation
Instrumentation Services**

www.sec-tn.com

Types of Instruments

Industrial Hygiene

- Multi-Gas
- PID / FID
- Noise
- Air Velocity
- In-door Air Quality
- Water Quality

Air Samplers

- Low Volume
- High Volume
- Lapel Samplers
- CAM

Radiological

- Scintillator
- Geiger-Muller Tube
- Gas Proportional
- Low Background Counters
- Personal Contamination Monitors
- Portable MCAs

Dose Rate

- Ion Chambers
- Micro R Meters
- Stretch Scopes
- SRD / EPD
- Solid State

Safety and Ecology Corporation (SEC) provides world-wide rental, calibration, and maintenance services for radiological and industrial hygiene instrumentation. SEC has Instrumentation Laboratories located in Knoxville, Tennessee and Richland, Washington, where we house more than 5000 instruments; one of the country's largest commercial instrument inventories.

When results matter, SEC services and instrumentation are just an over-night shipment away. We offer long-term and short-term lease options. We also provide professional consultation for custom instrumentation application and development.

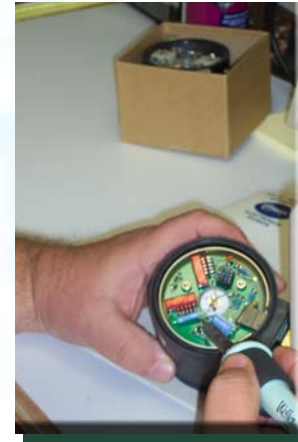
SEC calibrates and repairs Radiation Detection and Industrial Hygiene instruments of all makes and models from a variety of manufacturers. In addition, SEC also provides specialty instrumentation services that respond to today's nuclear industry trend toward D&D and environmental remediation support. Examples include: ISOCS/LabSOCS; Gamma Spectroscopy; and the Global Position Systems (GPS). SEC can utilize radiological instrumentation together with GPS to produce precise field measurements on CAD-quality survey maps.

All calibrations are performed to the requirements of ANSI N323A, 1997 unless otherwise requested. SEC Instrumentation Services operate under Tennessee Department of Environment and Conservation, Division of Radiological Health, Radioactive Material License number R-47161-JO6.



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SEC's Philosophy

We are responsive to our clients, who entrust us to serve their needs safely and effectively. In meeting our client's needs, we must strive to offer the highest quality services, while maintaining reasonable prices. We endeavor to forge strong, lasting bonds with our clients to ensure the success through our mutual relationships. Safety and Excellence in customer service is paramount to our success.



SEC Instrumentation Services

DOSE RATE CALIBRATION * REPAIR * RENTAL * CALIBRATION



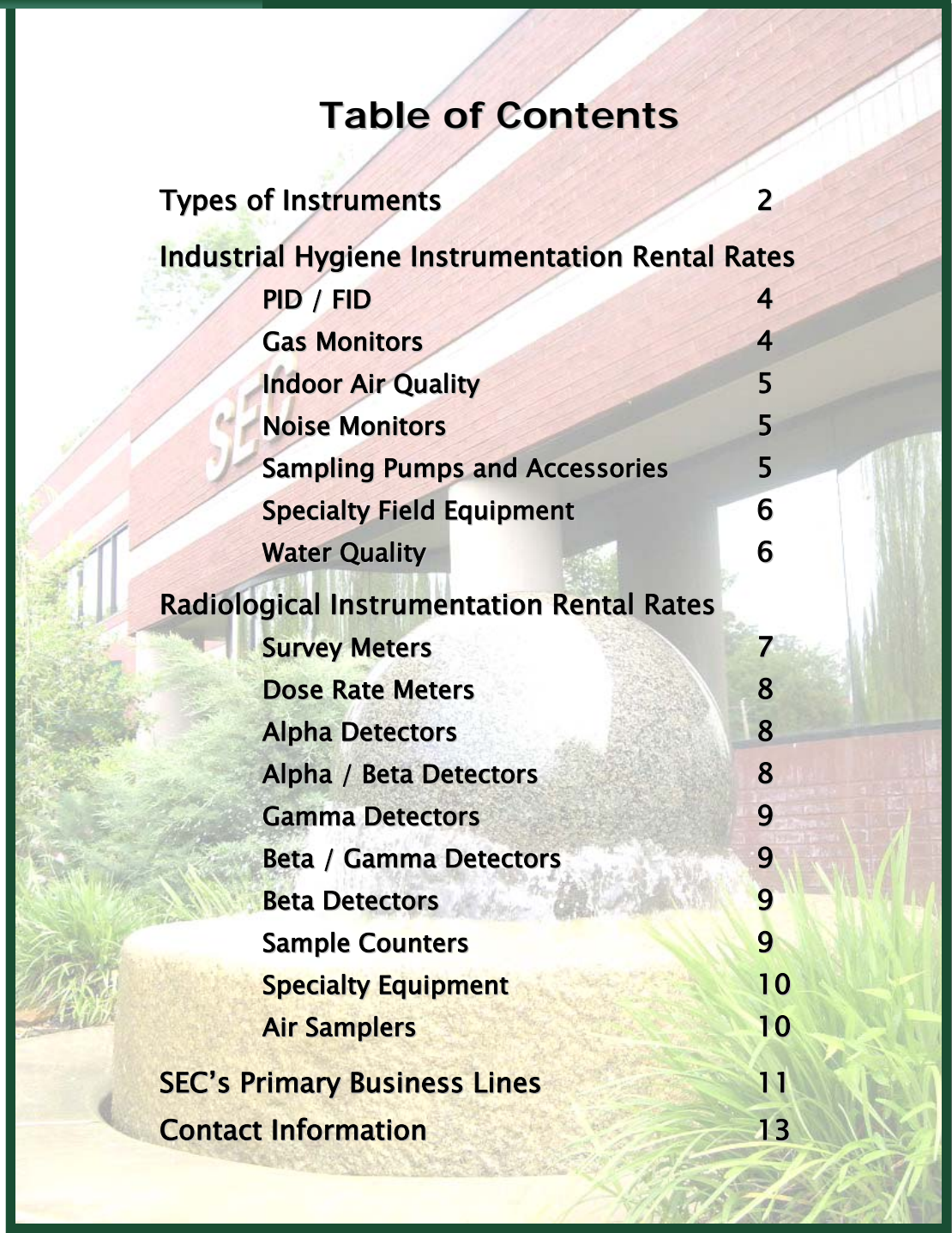
RADIOLOGICAL * INDUSTRIAL HYGIENE * INSTRUMENTATION

**Additional Services and
Quantity Discounts Available.**

Call for more information.

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IH Instrumentation

| | | Daily | Weekly | Monthly |
|---|--|-------|--------|---------|
| PID / FID | | | | |
| Flame Ionization Detector | Photovac MicroFid Range: 0-50,000 ppm | \$100 | \$300 | \$850 |
| Photo Ionization Detector | MiniRAE 2000 PID | \$75 | \$240 | \$700 |
| | MiniRAE Plus PID Range: 0-2000 ppm | \$60 | \$200 | \$600 |
| Gas Monitors | | | | |
|  Multi-Gas | MultiRAE - 4-gas + PID | \$75 | \$200 | \$625 |
| | Crowcon Tetra - 4-gas O ₂ , LEL, CO & H ₂ S | \$50 | \$150 | \$450 |
| | MSA Gas-Port O ₂ , LEL, % by vol. CH ₄ | \$70 | \$160 | \$575 |
| Ventilation Blowers | Air Systems Confined Space Blower 1570 CFM free air delivery (25" ventilation hose included) | \$60 | \$225 | \$575 |
| Single Gas | Single Gas CO Monitors | \$30 | \$75 | \$250 |
| | Jerome 431-x Mercury Vapor | \$125 | \$400 | \$1,075 |
| Indoor Air Quality | | | | |
| Indoor Air Quality | TSI 8762 IAQ Calc CO, CO ₂ , Temp, & Humidity | \$85 | \$200 | \$575 |
| Velocity | TSI 8386 VELOCICALC velocity, pressure, temp & RH | \$52 | \$85 | \$305 |
| Differential Pressure | Dwyer Digital Manometer 0 - 19.99" W.C. | \$15 | \$35 | \$90 |
| | Dwyer Incline Manometer .01" - 1.0" W.C. | \$7 | \$18 | \$50 |
| Moisture Meter | Protimeter Surveymaster | \$35 | \$55 | \$150 |
| Light Meter | Sper Scientific Light Meter | \$25 | \$45 | \$95 |
| Heat Stress | Questemp 34 W.B.G.T. - Area Monitor | \$60 | \$150 | \$450 |
| | RSS-214 W.B.G.T. - Area Monitors | \$60 | \$150 | \$550 |
| | Questemp II Personal Heat Stress Monitor | \$50 | \$135 | \$400 |



SEC's Primary Business Lines

Professional Services

- Industrial hygiene, safety & health, health physics consulting services, & training
- IH/S&H/HP program and plan development and implementation
- Radiological engineering
- Instrumentation rental, repair, and calibration (Dose Rate Calibration)
- Emergency Response
- Source term delineation/final status surveys
- Independent Verification Contractor
- On-site radiological laboratories
- RA/CERCLA/TSCA compliance

Remediation and D&D Services

- Reactor Facility D&D
- Contaminated facility demolition
- Preparation of plans and procedures
- Site characterization, sampling, and analysis
- Waste characterization, packaging, and transportation for disposal
- Abatement services
- Environmental site remediation and construction
- Bioremediation

Specialty Construction Services

- General contractor for building/facility construction
- Underground and overhead utility installation
- Building renovation
- Electrical/mechanical system removal/ installation
- Fencing and piping
- Equipment removal/installation
- Roadway, parking lot, and drainage system construction/repair
- Excavation and trenching





Safety and Ecology Corporation proudly staffs the industry's most experienced full-service instrumentation technicians. Our elite team can provide the highest quality repair and calibration services for all major manufacturers' models.

We look forward to providing you with the premium customer service you deserve while working with you in delivering the quality instruments you need at competitive prices.

All calibrations are performed in conformance with ANSI N323A, 1997 (to NIST-traceable sources and gases).



IH Instrumentation

| | | Daily | Weekly | Monthly |
|---|--|-------|--------|---------|
| Aerosol Monitors | | | | |
|  | TSI 8520 DustTrak 0.001 - 100 mg/m ³ | \$80 | \$200 | \$500 |
| | MIE PDR-1000 0.001 - 400 mg/m ³ | \$90 | \$225 | \$600 |
| | MIE DataRam 0.001 - 400 mg/m ³ | \$150 | \$400 | \$1,100 |
| Noise Monitors | | | | |
|  | Quest 2700 - Sound Meter w/Calibrator & Octave Band | \$40 | \$95 | \$310 |
| | Sper Scientific 840029 Sound Level Meter w/Calibrator | \$30 | \$75 | \$250 |
| | Quest Q-300 Noise Dosimeter w/Calibrator | \$50 | \$170 | \$475 |
| | Noise Pro DLX Noise Dosimeter w/Calibrator | \$50 | \$170 | \$475 |
| | * Noise Dosimeter 5 Pack Special * | \$185 | \$650 | \$1,700 |
| Sampling Pumps and Accessories | | | | |
| Air Sampling Pumps | Gilian GilAir-5 1-5000 cc/min. | \$25 | \$50 | \$185 |
| | SKC Universal PXR4 5-5000 cc/min. | \$25 | \$50 | \$185 |
| | MSA Escort Elf 1000-3000 cc/min. | \$25 | \$50 | \$185 |
| Pump Calibrators | Bios Dry-Cal Lite | \$30 | \$85 | \$225 |
| | Bios DC-1 | \$30 | \$85 | \$225 |
| | Gilian Gilibrator | \$30 | \$85 | \$225 |
| Sampling Accessories | MSA Gemini Twin Port Tube Sampling | \$7 | \$16 | \$50 |
| | SKC Aluminum Cyclone Respirable Dust Cylone | \$7 | \$16 | \$50 |
| Colormetric Tube Pump | Drager Accuro | \$13 | \$40 | \$100 |

IH Instrumentation

| | | Daily | Weekly | Monthly |
|---|--|-------|--------|---------|
| Specialty Field Equipment | | | | |
|  | Lightning Detectors Spectrum Thunderbolt Storm activity detection 0-70 miles | \$25 | \$65 | \$175 |
|  | Distance Meter Disto Pro 4 Distance Meter 650' Distance Range | \$25 | \$65 | \$175 |
|  | Digital Balance Ohaus Navigator / Scout Pro (calibration weight set) | \$15 | \$35 | \$90 |
| Water Quality | | | | |
|  | Oakton PC-10 pH, Cond. & Temp. | \$35 | \$55 | \$150 |
| | Horiba U22 | \$85 | \$255 | \$638 |
| | Horiba U10 | \$76 | \$228 | \$570 |
| | Water Level Meters | \$42 | \$126 | \$315 |
| | Oil / Water Interface | \$61 | \$183 | \$458 |
|  | Water Sampling Grundfos Redi-flow 2" | \$115 | \$235 | \$840 |
|  | Grundfos Controller | \$49 | \$147 | \$530 |
| | Peristaltic Pump | \$46 | \$96 | \$254 |
| | Mini-pump Variable Flow | \$13 | \$40 | \$100 |
| | Bladder Pump | \$125 | \$390 | \$1,100 |
|  | Generator HONDA 5000 Watt | \$50 | \$150 | \$400 |



Premium Customer Service

SEC has been providing the nuclear industry with quality instrumentation services since 1991. Our inventory of more than 5000 instruments is available for weekly or monthly rentals at affordable rates.



SEC's Business Hours:
8:00 AM to 5:00 PM
Monday - Friday



Contact Us:



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RAD Instrumentation

| | Weekly | Monthly |
|---|---------|---------|
| Specialty Equipment | | |
| Dexsil L2000 Analyzer (Chlorinated Organics - PCBs) | \$120 | \$350 |
| Exploranium GR-135 | \$395 | \$1,185 |
| Field ISOCs gamma spec unit with LabSOCS software | \$3,250 | \$9,700 |
| Canberra Gamma Spec | \$900 | \$2,700 |
| Protean IPC-9025 Low Background Counter | \$675 | \$2,000 |
| Radon Meter TN-WL-02 | \$110 | \$300 |
| SAMS unit, Berkeley Nuclear Spectroscopy System | \$500 | \$1,500 |
| Tennelec LB 5100 Low Background Smear Counter | \$1,175 | \$3,500 |
| Trimble GPS System | \$675 | \$2,000 |
| Dosimeters SRD's | \$10 | \$25 |
| SRD Charger | \$10 | \$25 |
| Dosimeters Electronic | \$20 | \$50 |
| PCM-1C | \$500 | \$1,500 |
| Air Samplers | | |
| F&J HV-1 High Volume 1-4 cfm | \$30 | \$75 |
| F&J LV-1 Low Volume 0-100 lpm | \$30 | \$75 |
| Staplex TFIA High Volume 0-30 cfm | \$30 | \$75 |



RAD Instrumentation

| | Weekly | Monthly |
|---|--------|---------|
| Survey Meters | | |
| Ludlum Model 3 Ratemeter | \$20 | \$50 |
| Ludlum Model 3 Scaler/Ratemeter | \$30 | \$75 |
| Ludlum Model 12 Scaler/Ratemeter | \$30 | \$75 |
| Ludlum Model 2221 Scaler/Ratemeter | \$70 | \$190 |
| Ludlum Model 2224 Alpha Beta Scaler/Ratemeter | \$60 | \$140 |
| Ludlum Model 2224-1 Alpha Beta Scaler/Ratemeter | \$60 | \$140 |
| Ludlum Model 2241 Digital Scaler/Ratemeter | \$40 | \$100 |
| Ludlum Model 2241-2 Digital Scaler/Ratemeter | \$40 | \$100 |
| Ludlum Model 2350-1 Data Logger | \$70 | \$190 |
| Ludlum Model 2360 Digital Scaler/Ratemeter | \$60 | \$140 |
| Ludlum Model 177 Alarm Ratemeter | \$30 | \$75 |
| Ludlum Model 177-61 Alarm Ratemeter | \$30 | \$75 |
| Ludlum Model 239-1F Floor Monitor w/Model 12 Scaler/Ratemeter | \$175 | \$525 |
| Ludlum Model 239-1F Floor Monitor w/Model 2221 Scaler/Ratemeter | \$175 | \$525 |
| Ludlum Model 239-1F Floor Monitor w/Model 2350-1 Data Logger | \$175 | \$525 |
| P-10 Regulator for use with 239-1F Floor Monitor | \$20 | \$50 |



RAD Instrumentation

| | Weekly | Monthly |
|--|--------|---------|
| Dose Rate Meters | | |
| Ludlum Model 15 Neutron Counter | \$100 | \$240 |
| Ludlum Model 2241-4 Neutron Counter | \$100 | \$240 |
| Ludlum Model 12-4 Neutron Counter | \$100 | \$240 |
| Ludlum Model 9 Ion Chamber | \$40 | \$100 |
| Ludlum Model 19 Micro R Meter | \$40 | \$100 |
| Automess 6112B Extendable Dose Rate meter (Teletector) | \$175 | \$525 |
| Bicron Micro Rem Meter | \$70 | \$190 |
| Eberline RO-7 Ion Chamber with up to 3 detectors | \$175 | \$525 |
| Eberline RO-20 Ion Chamber | \$45 | \$125 |
| Alpha Detectors | | |
| Ludlum Model 43-5 50 cm ² Alpha Scintillator | \$30 | \$75 |
| Ludlum Model 43-10 Alpha Sample Counter | \$40 | \$100 |
| Ludlum Model 43-90 100 cm ² Alpha Scintillator | \$40 | \$100 |
| Alpha / Beta Detectors | | |
| Ludlum Model 43-10-1 Alpha Beta Smear Counter | \$40 | \$100 |
| Ludlum Model 43-37 500 cm ² Gas Proportional Detector | \$45 | \$125 |
| Ludlum Model 43-68 100 cm ² Gas Proportional Detector | \$20 | \$50 |
| Ludlum Model 43-2-2 Dual Phosphor Scintillator Detector | \$40 | \$100 |



RAD Instrumentation

| | Weekly | Monthly |
|---|--------|---------|
| Gamma Detectors | | |
| Ludlum Model 44-2 1"x1" NaI Gamma Scintillator | \$20 | \$50 |
| Ludlum Model 44-10 2"x2" NaI Gamma Scintillator | \$40 | \$100 |
| Ludlum Model 44-19 1"x2" NaI Gamma Scintillator | \$40 | \$100 |
| Ludlum Model 44-20 3"x3" NaI Integral Gamma Scintillator | \$100 | \$240 |
| Ludlum Model 44-62 1/2"x1" NaI Gamma Scintillator | \$40 | \$100 |
| Ludlum Model 43-89 100 cm ² Alpha/Beta Scintillator | \$40 | \$100 |
| G-5 or B2/5 FIDLER probes | \$200 | \$600 |
| Alpha / Beta / Gamma Detectors | | |
| Ludlum Model 44-7 Thin End Window G-M Detector | \$16 | \$40 |
| Ludlum Model 44-9 Pancake G-M Detector | \$16 | \$40 |
| Ludlum Model 44-40 Shielded Pancake G-M Detector | \$16 | \$40 |
| Eberline HP-210L Shielded Pancake G-M Detector | \$16 | \$40 |
| Beta / Gamma Detectors | | |
| Ludlum Model 44-38 Energy Compensated G-M Detector | \$16 | \$40 |
| Beta Detectors | | |
| Ludlum Model 44-110 100 cm ² Gas Proportional Tritium Detector | \$45 | \$125 |
| Ludlum Model 44-116 100 cm ² Beta Scintillator | \$40 | \$100 |
| Sample Counters | | |
| Ludlum Model 2000 Scaler w/Model 43-10 Sample Counter | \$45 | \$125 |
| Ludlum Model 2929 Scaler w/Model 43-10-1 Sample Counter | \$100 | \$240 |